



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,911	11/08/2000	Etsushi Yajima	09792909-4681	2666

7590

07/02/2002

David R Metzger
Sonnenschein Nath & Rosenthal
P O Box #061080
Wacker Drive Station
Chicago, IL 60606-1080

EXAMINER

MERCADO, JULIAN A

ART UNIT

PAPER NUMBER

1745

7

DATE MAILED: 07/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

ME-7

Office Action Summary

Application No.

09/708,911

Applicant(s)

YAJIMA ET AL.

Examiner

Julian A. Mercado

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-10 is/are allowed.
- 6) ☐ Claim(s) 11-24 is/are rejected.
- 7) ☐ Claim(s) 22 and 23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Claim Objections

Claims 22 and 23 are objected to because of the following informalities:

In claim 22 at line 1, it is suggested to delete "of" after "comprising".

In claim 23 at line 2, it is suggested to delete "each other" after "predetermined".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23 and 24 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 recites the limitation "the longitudinal direction" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim 24 recites the limitation "the seal portions" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102 and 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1745

A person shall be entitled to a patent unless –

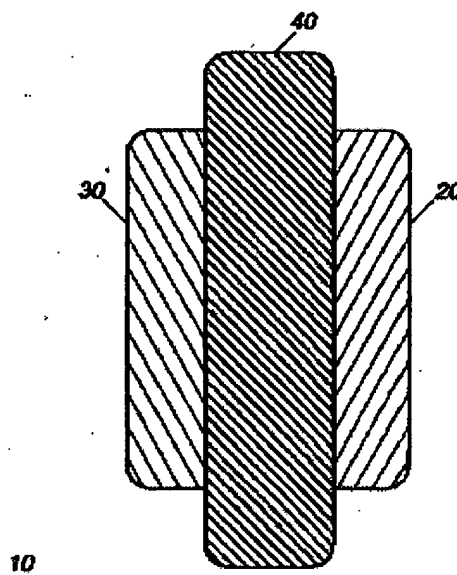
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-22 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gies et al. (U.S. Pat. 5,665,265)

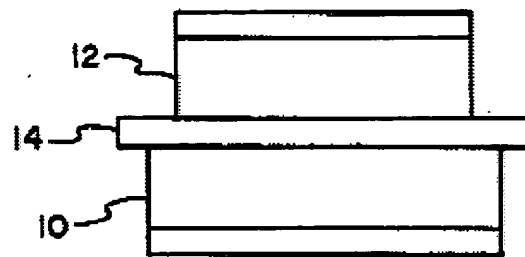
At the outset, the examiner notes that the claims are recited in product-by-process format. The limitations drawn to the electrode or product, therefore, are found only to delineate such an electrode having a rectangular carrier and a gel electrolyte film, wherein the gel electrolyte film has a width greater than that of the electrode carrier. Gies teaches the claimed invention in that a rectangular electrode [20] or [30] has a gel electrolyte film [40] which can be appreciated to have a width wider than the width of the electrode as seen in Figure 1 below.

**FIG. 1**

The gel electrolyte film is disclosed to be in a sol state. (col. 3 line 10 et seq.) From this cited portion of Gies, one will find disclosed that the film contains an electrolyte salt such as LiPF_6 , a matrix polymer, and a swelling solvent such as ethylene carbonate.

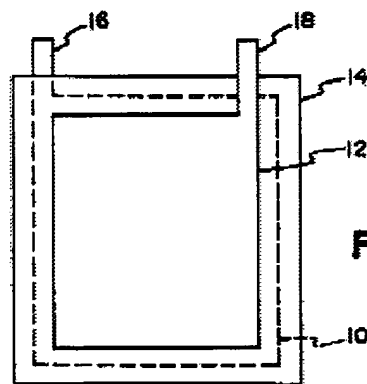
Claims 11-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sun. (U.S. Pat. 5,609,974)

As to a gel electrolyte film having a width greater than that of the electrode carrier, Sun teaches a rectangular electrode [10] or [12] which has a gel electrolyte film [14] having a width wider than the width of the electrode, as seen in Figure 2 below.

**Fig. 2**

The gel electrolyte film is disclosed to be in a sol state. (col. 2 line 39 et seq.) An electrolyte salt such as LiPF_6 , a matrix polymer, and a swelling solvent such as ethylene carbonate are additionally disclosed. The electrodes are at predetermined lengths, in that each is at a distinct length relative to the other. The patentees also teach a "jelly roll" configuration, wherein the cell is sealed in a foil/poly outer bag, such a bag considered to be an insulation material. (col. 7 lines 43-46, line 66 et seq.)

As to a positive and negative electrode lead protruding through the insulation material, Sun teaches such a configuration as shown in Figure 1.

**Fig. 1**

In view of the foregoing reasons, the prior art product appears to be the same or at least only slightly different from the claimed product, thus, the claims are anticipated by either Gies or Sun. However, if the claims are not anticipated, the claims would be obvious in view of the prior

Art Unit: 1745

art as it has been held that similar products claimed in product-by-process limitations are obvious. *In re Brown* 173 USPQ 685, *In re Fessman* 180 USPQ 324. In the event any differences can be shown for the product of the product-by-process claims, as opposed to the product taught by either Gies or Sun, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product absent of a showing of unexpected results. *In re Thorpe* 227 USPQ 964.

Allowable Subject Matter

Claims 1-10 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record and to the examiner's knowledge do not teach or render obvious at least to the skilled artisan the instant invention regarding coating onto a first carrier an electrolyte composition having a width greater than the width of a second carrier but smaller than the width of the first carrier, subsequently followed by the instant first and second peel-off steps.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1745

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Pat. 6,227,516 B1 to Sasaki et al., U.S. Pat. 6,316,142 B1 to Delnick et al. and U.S. Pat. 6,376,128 B1 to Goto are cited of cumulative interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian A. Mercado whose telephone number is (703) 305-0511. The examiner can normally be reached on Monday through Friday.

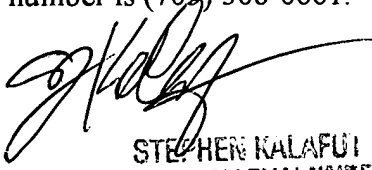
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (703) 308-2383. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3599 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



jam

June 27, 2002



STEPHEN KALAFUT
PRIMARY EXAMINER
GROUP

1700